

Amendment to the Claims

Listing of Claims:

This listing of claims will replace all prior versions, and listings, of claims in the application:

Claims 1-6 (cancelled)

7. (Currently amended) A method of mining a collection of data, comprising:

receiving a collection of data, the collection of data comprising key words;

converting the received data into labeled data ~~a common format~~;

combining the converted received data into clauses of related data;

~~attempting to associate a category with each word within each of the clauses;~~

assigning a category to one or more key words from the labeled data;

identifying mutually dependent relationships between or among the categorized words, according to at least one rule defining mutually dependent relationships between or among categorized words;

grouping the identified mutually dependent relationships into groups of related mutually dependent relationships; and

extracting unique concepts associated with the identified groups of related mutually dependent relationships, wherein the step of extracting unique concepts comprises recognizing the identified groups of related mutually dependent relationships in which a statistical characteristic ~~the related mutually dependent relationships~~ exceed a configurable threshold of the set of related mutually dependent relationships.

8. (Previously presented) The method of claim 7 wherein the categorized words identified as being in a mutually dependent relationship exist within separate clauses.

9. (currently amended) The method of claim 8 wherein the separate

clauses ~~clause~~ exist within separate sentences.

10. (currently amended) The method of claim 7 wherein the converting step comprises conversion of the received collection of data into the same format[[,]] and wherein the received collection of data comprises ~~is made up~~ of various data formats.

11. (Currently amended) The method of claim 7 wherein the key words comprise a coherent character string within the clauses.

12.(Previously presented) The method of claim 7 wherein the associating of a category with each key word comprises searching a category dictionary to identify a category which matches the key word.

13. (Currently amended) The method of claim 12 wherein the category dictionary comprises ~~is comprised of~~ combinations of original expressions, parts of speech, concepts and categories, wherein the original expressions are equivalent to the key words, the parts of speech are a classification of the key words, the concepts are replacement expressions for the key words and the categories represent a larger group having the nature of the key word.

14.(Currently amended) The method of claim 7 wherein the mutually dependent relationships are determined according to rules applied to key words ~~keywords~~ and their associated categories within a clause.

15.(Currently amended) The method of claim 7 wherein identifying the groups in which the related mutually dependent relationships exceed a ~~configurable~~ threshold is achieved automatically through utilization of computer generated or user defined rules in which the ~~configurable~~ threshold is defined for each category.

16.(Currently amended) The method of claim 7 wherein the ~~configurable~~ threshold is provided manually by a user for each of the identified groups of mutually dependent relationships in response to the user being presented a

display of all the groups of mutually dependent relationships, at a GUI.

17.(Currently amended) The method of claim 7 further comprising presenting the identified groups in which the ~~configurable~~ threshold was exceeded to a user at a GUI.

18.(Currently amended) The method of claim 7 further comprising comparing the identified groups in which the ~~configurable~~ threshold was exceeded against a set of rules to determine a course of action, wherein the course of action comprises automatically notifying a user that the exceeding of the threshold, logging the exceeding of the threshold in a user accessible file, or ignoring the exceeding of the threshold.

19.(Previously presented) The method of claim 7 wherein the set of rules are predefined.

20.(Previously presented) The method of claim 7 wherein the set of rules are entered manually by a user during a request by the user for specific relationships between categories, whereby mutually dependent relationships by categories are defined by the user according to the user's needs.

21.(Currently amended) An article of manufacture, embodying logic to perform a method of mining a collection of data ~~to identify related concepts which occur at a frequency greater than a configurable threshold~~, comprising:

- receiving a collection of data, the collection of data comprising key words;
- converting the received data into a labeled data ~~a common format~~;
- combining the converted received data into clauses of related data;
- ~~attempting to associate a category with each word within each of the clauses;~~
- assigning a category to one or more key words from the labeled data;
- identifying mutually dependent relationships between or among the categorized words, within each of the clauses;
- grouping the identified mutually dependent relationships into groups of related mutually dependent relationships; and
- identifying the groups including mutually dependent relationships which occur at a frequency greater than a ~~configurable~~ threshold with respect to the set of mutually dependent relationships,

whereby a search query is not required.

22.(Previously presented) The article of manufacture of claim 21 wherein converting comprises conversion of the received collection of data into the same format, wherein the received collection of data is made up of various data formats.

23.(Previously presented) The article of manufacture of claim 21 wherein the key word comprises a coherent character string within the clauses.

24.(Previously presented) The article of manufacture of claim 21 wherein the associating of a category with each key word comprises searching a category dictionary to identify a category which matches the key word.

25.(Previously presented) The article of manufacture of claim 24 wherein the category dictionary comprises combinations of original expressions, parts of speech, concepts and categories, wherein the original expressions are equivalent to the key words, the parts of speech are a classification of the key words, the concepts are replacement expressions for the key words and the categories represent a larger group having the nature of the key word.

26.(Currently amended) The article of manufacture of claim 21 wherein the mutually dependent relationships are determined according to rules applied to key words ~~key words~~ and their associated categories within a clause.

27. (Cancelled) .

28. (Canceled).

29. (new) A system for data mining, comprising:

a data conversion subsystem for receiving an input of inquiry data and for providing labeled data;

a concept extraction subsystem for assigning a category to a key word of input labeled data and for extracting from among the key words to which a category is assigned; and

a search/characteristic detection subsystem for receiving labeled data with concepts and for extending unique concepts, a unique concept being a concept whose statistical characteristic is distinguished beyond a threshold with respect to the set to which it belongs.

30. (new) A data mining service comprising:

a data conversion service for receiving an input of inquiry data and for providing labeled data;

a concept extraction service for assigning a category to a key word of input labeled data and for extracting from among the key words to which a category is assigned; and

a search/characteristic detection service for receiving labeled data with concepts and for extending unique concepts, a unique concept being a concept whose statistical characteristic is distinguished beyond a threshold with respect to the set to which it belongs.